```
 s reverse(w)transcript? (9a) temperature#
   2 FILES SEARCHED...
L1          172 REVERSE(W) TRANSCRIPT? (9A) TEMPERATURE#

=> s l1 and optim?
L2           16 L1 AND OPTIM?

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3            11 DUP REM L2 (5 DUPLICATES REMOVED)

=> d 1-11 ti

L3   ANSWER 1 OF 11     MEDLINE                          DUPLICATE 1
TI   Temperature-controlled primer limit for multiplexing of rapid,
     quantitative reverse transcription-PCR assays:
     application to intraoperative cancer diagnostics.

L3   ANSWER 2 OF 11  CAPLUS  COPYRIGHT 2002 ACS
TI   Optimization of reverse transcriptase PCR to detect viable
     Shiga-toxin-producing Escherichia coli

L3   ANSWER 3 OF 11  CAPLUS  COPYRIGHT 2002 ACS
TI   Reverse transcriptase formulations with optimized conditions

L3   ANSWER 4 OF 11     MEDLINE                          DUPLICATE 2
TI   Reverse transcription slippage over the mRNA secondary structure of the
     LIP1 gene.

L3   ANSWER 5 OF 11  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Reverse transcription slippage over the mRNA secondary structure of the
     LIP1 gene.

L3   ANSWER 6 OF 11     MEDLINE                          DUPLICATE 3
TI   Generation of full-length cDNA of the two genomic dsRNA segments of
     infectious bursal disease virus.

L3   ANSWER 7 OF 11     MEDLINE                          DUPLICATE 4
TI   Immuno affinity purification of foot and mouth disease virus type specific
     antibodies using recombinant protein adsorbed to polystyrene wells.

L3   ANSWER 8 OF 11  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Evidence for retrovirus infections in green turtles Chelonia mydas from
     the Hawaiian Islands.

L3   ANSWER 9 OF 11  CAPLUS  COPYRIGHT 2002 ACS
TI   Use of elevated reverse transcription reaction
     temperatures in RT-PCR

L3   ANSWER 10 OF 11     MEDLINE                          DUPLICATE 5
TI   Direct amplification and cloning of up to 5-kb lentivirus genomes from
     serum.

L3   ANSWER 11 OF 11  CAPLUS  COPYRIGHT 2002 ACS
TI   Reverse-transcription polymerase chain reaction for selective detection of
     RNA of single polarity: The role of reverse-
     transcription incubation temperature


=> d 9 bib ab

L3   ANSWER 9 OF 11  CAPLUS  COPYRIGHT 2002 ACS
```

AN 1996:274062 CAPLUS
DN 124:308634
TI Use of elevated **reverse transcription** reaction **temperatures** in RT-PCR
AU Freeman, Willard M.; Vrana, Sheila L.; Vrana, Kent E.
CS The Bowman Gray School of Medicine, Winston-Salem, NC, USA
SO BioTechniques (1996), 20(5), 782-783
CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton
DT Journal
LA English
AB The temp. of the reverse transcription step may be elevated (to 50.degree., e.g.) above the **optimal** temp. for for reverse transcriptase (42.degree.) to minimize unwanted primer hybridization and subsequent amplification of unexpected PCR products.

=> d 10, 11 bib ab

L3 ANSWER 10 OF 11 MEDLINE DUPLICATE 5
AN 97016181 MEDLINE
DN 97016181 PubMed ID: 8862818
TI Direct amplification and cloning of up to 5-kb lentivirus genomes from serum.
AU Holterman L; Mullins J I; Haaijman J J; Heeney J L
CS Biomedical Primate Research Centre, Rijswijk, The Netherlands.
SO BIOTECHNIQUES, (1996 Aug) 21 (2) 312-9.
Journal code: 8306785. ISSN: 0736-6205.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199704
ED Entered STN: 19970414
Last Updated on STN: 19970414
Entered Medline: 19970403
AB To produce large cDNA strands from biological samples containing limited numbers of template molecules, it may be necessary to minimize both nonspecific primer attachment in first-strand synthesis and secondary structure in RNA molecules. Failure to do so could result in the accumulation of shortened cDNA strands and therefore may reduce the yield of large cDNA molecules, sometimes below detection level. We show that 5.0-kb cDNA fragments can be generated from simian immunodeficiency virus RNA in a specific reverse transcription (RT)-PCR by increasing the stringency of the primer-annealing conditions, followed by the elimination of excess free primer. Since this method utilizes a relatively long primer in the first-strand cDNA synthesis, it is possible to heat-denature the nonspecific RNA/primer complexes and RNA secondary structure without dissociating the primer from the specific template. In contrast to classic RT assays, in which an excess of primer is annealed to denatured RNA just prior to and during **reverse transcription** at relative low **temperatures** (37 degrees-42 degrees C), this method eliminates false priming. To **optimize** the yield and fidelity of full-length cDNA molecules, two PCR amplifications are first performed using both Taq and Pfu polymerase, followed by Pfu alone in the second amplification.

L3 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1994:500781 CAPLUS
DN 121:100781
TI Reverse-transcription polymerase chain reaction for selective detection of RNA of single polarity: The role of **reverse-**

transcription incubation **temperature**
AU Tolou, Hugues
CS Lab. Biol. Mol. Virus, Inst. Med. Tropicale du Service Sante Armees, Marseille Armee, 13998, Fr.
SO Analytical Biochemistry (1994), 220(1), 216-17
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB This report illustrates the limiting role of reverse transcription (RT) for the detection of RNA of defined polarity in samples where mols. of both polarity are present. The relevance of an increased incubation temp., within the limits of reverse transcriptase stability, is exemplified, with low std. temps. giving considerable background noise. The length and base compn. of the primer used in RT are certainly important parameters for RT-PCR **optimization**. The length of the cDNA fragment to be amplified by PCR might play a non-negligible role too: the larger the cDNA, the lower the probability of amplification from mols. synthesized by nonspecific priming.

=> d his

(FILE 'HOME' ENTERED AT 11:01:42 ON 25 SEP 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 11:01:58 ON 25 SEP 2002
L1 172 S REVERSE(W)TRANSCRIPT? (9A) TEMPERATURE#
L2 16 S L1 AND OPTIM?
L3 11 DUP REM L2 (5 DUPLICATES REMOVED)

=> s l1 and py<1993
2 FILES SEARCHED...
L4 34 L1 AND PY<1993

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 23 DUP REM L4 (11 DUPLICATES REMOVED)

=> d 1-23 ti

L5 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2002 ACS
TI Use of manganese, metal ion buffer, and thermostable DNA polymerase for coupled high **temperature reverse transcription** and polymerase chain reaction.

L5 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2002 ACS
TI Inhibition of heat inactivation of reverse transcriptase of human immunodeficiency virus type 1 by seropositive sera

L5 ANSWER 3 OF 23 MEDLINE DUPLICATE 1
TI Immune-mediated thrombocytopenia in horses infected with equine infectious anemia virus.

L5 ANSWER 4 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI THE CLONED HUMAN ESTROGEN RECEPTOR CONTAINS A MUTATION WHICH ALTERS ITS HORMONE BINDING PROPERTIES.

L5 ANSWER 5 OF 23 MEDLINE DUPLICATE 2
TI Discriminatory 32P 3'-end labeling of restriction endonuclease co-digested DNA fragments.

L5 ANSWER 6 OF 23 MEDLINE DUPLICATE 3
TI Use of avian myeloblastosis virus **reverse transcriptase**

at high **temperature** for sequence analysis of highly structured RNA.

L5 ANSWER 7 OF 23 MEDLINE DUPLICATE 4
TI Deletion in the 3' pol sequence correlates with aberration of RNA expression in certain replication-defective avian sarcoma viruses.

L5 ANSWER 8 OF 23 MEDLINE DUPLICATE 5
TI Characterization of a replication-defective temperature-sensitive mutant of Rous sarcoma virus.

L5 ANSWER 9 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI PERSISTENT INFECTION OF FRIEND ERYTHRO LEUKEMIA CELLS WITH VACCINIA VIRUS.

L5 ANSWER 10 OF 23 MEDLINE DUPLICATE 6
TI Virus-coded DNA endonuclease from avian retrovirus.

L5 ANSWER 11 OF 23 MEDLINE DUPLICATE 7
TI Isolation and properties of Moloney murine leukemia virus mutants: use of a rapid assay for release of virion reverse transcriptase.

L5 ANSWER 12 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI CHARACTERIZATION AND GENETIC ANALYSIS OF RETROVIRUS MATURATION A ROLE FOR PR-180-GAG-POL.

L5 ANSWER 13 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI INTERACTION OF RETROVIRUSES WITH CHEMICAL CARCINOGENS COVALENT BINDING OF RACEMIC 17-BETA 8-ALPHA DI HYDROXY-9-ALPHA 10-ALPHA-EPOXY-7 8 9 10 TETRA HYDRO BENZO A PYRENE.

L5 ANSWER 14 OF 23 MEDLINE DUPLICATE 8
TI Binding of tryptophanyl-tRNA to the reverse transcriptase of replication-defective avian sarcoma viruses.

L5 ANSWER 15 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI THE EFFECT OF INTERFERON ON DE-NOVO INFECTION OF MOLONEY MURINE LEUKEMIA VIRUS.

L5 ANSWER 16 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI ON THE FIDELITY OF DNA REPLICATION ENZYME ACTIVITIES ASSOCIATED WITH DNA POLYMERASES FROM RNA TUMOR VIRUSES.

L5 ANSWER 17 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI PARTIAL GENETIC MAP OF ROUS SARCOMA VIRUS RNA.

L5 ANSWER 18 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI EVIDENCE FOR HYBRID FORMATION BETWEEN RUBELLA VIRUS AND A LATENT VIRUS OF BABY HAMSTER KIDNEY BHK-21-WI-2 CELLS.

L5 ANSWER 19 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI ELECTRON MICROSCOPY OF MAMMALIAN TYPE C RNA VIRUSES USE OF CONDITIONAL LETHAL MUTANTS IN STUDIES OF VIRION MATURATION AND ASSEMBLY.

L5 ANSWER 20 OF 23 MEDLINE DUPLICATE 9
TI Thermolabile **reverse transcriptase** of a mammalian leukemia virus mutant **temperature** sensitive in its replication and sarcoma virus helper functions.

L5 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2002 ACS
TI A thermolabile **reverse transcriptase** from a **temperature**-sensitive mutant of murine leukemia virus

L5 ANSWER 22 OF 23 MEDLINE
TI RNA-dependent DNA polymerase activity of RNA tumor viruses. V. Rous sarcoma virus single-stranded RNA-DNA covalent hybrids in infected chicken embryo fibroblast cells.

L5 ANSWER 23 OF 23 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI INFIDELITY OF **TEMPERATURE** SENSITIVE **REVERSE TRANSCRIPTASE**.

=> d 1, 6 bib ab

L5 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2002 ACS
AN 1997:805561 CAPLUS
DN 128:44658
TI Use of manganese, metal ion buffer, and thermostable DNA polymerase for coupled high **temperature reverse transcription** and polymerase chain reaction.
IN Gelfand, David H.; Myers, Thomas W.; Sigua, Christopher L.
PA Roche Molecular Systems, Inc., USA
SO U.S., 36 pp., Cont.-in-part of U.S. Ser. No. 899,241, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 27

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5693517	A	19971202	US 1995-384817	19950202	
	US 4889818	A	19891226	US 1987-63509	19870617	<--
	US 5322770	A	19940621	US 1989-455611	19891222	
	JP 09224682	A2	19970902	JP 1996-246648	19901221	
	CA 2087724	AA	19920125	CA 1991-2087724	19910723	<--
	US 6127155	A	20001003	US 1992-873897	19920424	
	US 5352600	A	19941004	US 1992-971798	19921105	
	US 5418149	A	19950523	US 1993-960362	19930105	
	US 5407800	A	19950418	US 1993-80243	19930617	
	US 5310652	A	19940510	US 1993-82182	19930624	
	US 5455170	A	19951003	US 1993-113531	19930827	
	US 5618703	A	19970408	US 1994-199509	19940222	
	US 5641864	A	19970624	US 1994-311612	19940922	
	US 5618711	A	19970408	US 1995-384490	19950206	
	US 5561058	A	19961001	US 1995-449050	19950524	
	US 5789224	A	19980804	US 1995-459383	19950602	
	US 5795762	A	19980818	US 1995-458819	19950602	
	US 5674738	A	19971007	US 1995-520422	19950829	
PRAI	US 1987-63509	A2	19870617			
	US 1988-143441	B2	19880112			
	US 1989-455611	A2	19891222			
	US 1989-455967	B1	19891222			
	US 1990-557517	B2	19900724			
	US 1990-585471	B2	19900920			
	US 1990-609157	B2	19901102			
	US 1991-746121	B1	19910815			
	US 1992-880478	B2	19920506			
	US 1993-960362	A2	19930105			
	US 1993-82182	A2	19930624			
	US 1993-86483	B1	19930701			
	US 1996-899241	B2	19960822			
	US 1986-899241	A2	19860822			
	US 1989-387003	B1	19890728			
	US 1989-387174	B1	19890728			
	US 1990-523394	A2	19900515			

	US 1990-590213	B2	19900928
	US 1990-590466	B1	19900928
	US 1990-590490	B2	19900928
	JP 1991-502929	A3	19901221
	WO 1991-US5210	W	19910723
	US 1993-977434	A1	19930223
	US 1993-113531	A3	19930827
	US 1993-148133	B1	19931102
	US 1994-199509	A1	19940222
	US 1995-384817	B3	19950202
	US 1995-384490	A3	19950206

AB Methods are provided for the replication and amplification of RNA sequences by thermostable DNA polymerases. The reverse transcription reaction is performed in a medium contg. a buffer which buffers both the pH and the divalent cation concn (e.g., bicine or tricine). Said divalent cation is preferably Mn2+. In a preferred embodiment, high temp. reverse transcription is coupled to nucleic acid amplification in a one tube, one enzyme procedure using a thermostable DNA polymerase. A method for eliminating carryover contamination of amplifications due to prior reverse transcription reactions are also provided. This method comprises incorporation of an unconventional nucleotide (such as dUTP) into the cDNA and destruction of unwanted cDNA contg. the unconventional nucleotide by hydrolysis (with uracil N-glycosylase, for example). Reagents and kits particularly suited for the methods of the present invention are provided. Using Thermus thermophilus DNA polymerase and MnCl2 or Mn(OAc)2 for amplifying RNA imparts an increase in sensitivity of .gtoreq.106-fold compared to std. PCR conditions (using MgCl2).

L5 ANSWER 6 OF 23 MEDLINE DUPLICATE 3
AN 89307122 MEDLINE
DN 89307122 PubMed ID: 2473018
TI Use of avian myeloblastosis virus **reverse transcriptase** at high **temperature** for sequence analysis of highly structured RNA.
AU Shimomaye E; Salvato M
CS Department of Immunology, Scripps Clinic and Research Foundation, La Jolla, CA 92037.
NC AI-09484 (NIAID)
AI-25522 (NIAID)
SO GENE ANALYSIS TECHNIQUES, **(1989 Mar-Apr)** 6 (2) 25-8.
Journal code: 8408118. ISSN: 0735-0651.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198908
ED Entered STN: 19900309
Last Updated on STN: 19970203
Entered Medline: 19890817
AB Avian myeloblastosis virus reverse transcriptase (AMV RT) is routinely used in the sequence analysis of RNA and DNA templates. We review the various methods for dealing with secondary structures that would otherwise result in premature termination or sequence compression. Based on our experience in sequencing the 11-kb single-stranded RNA genome of lymphocytic choriomeningitis virus, we have found that raising the reaction temperature above 47 degrees C is the simplest way to overcome template secondary structure, and the use of 98% formamide gels is the simplest way to overcome product secondary structure.

=> FIL STNGUIDE
COST IN U.S. DOLLARS SINCE FILE TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	23.87	24.08

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CA SUBSCRIBER PRICE	-1.86	-1.86

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LAST RELOADED: Sep 20, 2002 (20020920/UP).

=> file registry

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FULL ESTIMATED COST	0.12	24.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.86

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DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

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Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s cctatctgtcccctcagctac/sqsn
L6 13 CCTATCTGTCCCCTCAGCTAC/SQSN

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.88	51.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.86

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FILE COVERS 1907 - 25 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 24 Sep 2002 (20020924/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s l6
L7 5 L6

=> d 1-5 bib ab

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 2001:830872 CAPLUS
DN 135:366715
TI HIV-1-derived genetic suppressor elements (GSEs) and their uses to inhibit HIV infection and prevent tumorigenesis
IN Holzmayer, Tanya A.; Dunn, Stephen J.
PA Subsidiary No. 3, Inc., USA
SO U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 218,755.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6316210	B1	20011113	US 1999-388128	19990901
	US 6426412	B1	20020730	US 1996-775703	19961218
	WO 9722722	A1	19970626	WO 1996-US20435	19961220
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	WO 2001015741	A2	20010308	WO 2000-US24144	20000901
	WO 2001015741	A3	20010907		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1995-575416 B2 19951220
US 1996-775703 A2 19961218
WO 1996-US20435 A2 19961220
US 1998-218755 A2 19981222
US 1999-388128 A1 19990901

AB The present invention relates to genetic elements that suppress the activities of the human immunodeficiency virus (HIV). In particular, the invention relates to polynucleotides isolated from the HIV-1 genome, methods for isolating, identifying and designing such polynucleotides, and methods for using them for the protection of human cells against HIV infection and/or replication. Thus, nucleotide fragments were isolated from the HIV-1 genome, based on their ability to suppress the activation of latent HIV-1 in a CD4+ cell line. Any cellular or viral marker assocd. with HIV replication, such as CD4, can be used to monitor the activation of latent HIV in OM10.1 cells after TNF-.alpha. induction. Eight genetic suppressor elements (GSE) selected by this procedure suppress HIV-1 infection and also protect uninfected cells from HIV infection. The present invention also relates to polynucleotides that prevent tumor cell formation and the use of such polynucleotides to prevent tumorigenesis.

RE.CNT 177 THERE ARE 177 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 2001:537430 CAPLUS
DN 135:133103
TI Direct molecular cloning of foreign genes into poxviruses and methods for the preparation of recombinant proteins
IN Dorner, Friedrich; Scheiflinger, Friedrich; Falkner, Falko Gunter; Pfleiderer, Michael
PA Baxter Aktiengesellschaft, Australia
SO U.S., 172 pp., Cont.-in-part of U.S. Ser. No. 914,738, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6265183	B1	20010724	US 1994-358928	19941219
	US 5445953	A	19950829	US 1991-750080	19910826
	EP 561034	A2	19930922	EP 1992-113675	19920811
	EP 561034	A3	19950426		
	EP 561034	B1	19990609		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	AT 181108	E	19990615	AT 1992-113675	19920811
	NO 9203323	A	19930301	NO 1992-3323	19920825
	AU 9221269	A1	19930304	AU 1992-21269	19920825
	AU 652467	B2	19940825		
	HU 69927	A2	19950928	HU 1992-2737	19920825
	HU 219369	B	20010328		
	BR 9203322	A	19930330	BR 1992-3322	19920826
	JP 06261763	A2	19940920	JP 1992-250826	19920826
	US 6103244	A	20000815	US 1996-651472	19960522
PRAI	US 1991-750080	A2	19910826		
	US 1992-914738	B2	19920720		
	US 1994-358928	A3	19941219		

AB A method is disclosed for producing a modified eukaryotic cytoplasmic DNA virus, as exemplified by a poxvirus, by direct mol. cloning of a modified DNA mol. comprising a modified cytoplasmic DNA virus genome. The inventive method comprises the steps of (I) modifying under extracellular conditions a DNA mol. comprising a first cytoplasmic DNA virus genome to

produce a modified DNA mol. comprising the modified cytoplasmic DNA virus genome; (II) introducing the modified DNA mol. into a first host cell which packages the modified DNA mol. into infectious virions; and (III) recovering from the host cell virions comprised of the modified viral genome. The host cell is infected with a helper virus which is expressed to package the modified viral genome into infectious virions. Examples of packaging a modified poxvirus genome by a helper poxvirus of the same or different genus are described. Also disclosed are novel poxvirus vectors for direct mol. cloning of open reading frames into a restriction enzyme cleavage site that is unique in the vector. In one model poxvirus vector, the open reading frame is transcribed by a promoter located in the vector DNA upstream of a multiple cloning site comprised of several unique cleavage sites.

RE.CNT 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 2001:167847 CAPLUS
DN 134:221459
TI Genetic suppressor elements against human immunodeficiency virus
IN Holzmayer, Tanya A.; Dunn, Stephen J.
PA Subsidiary No. 3, Inc., USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001015741	A2	20010308	WO 2000-US24144	20000901
	WO 2001015741	A3	20010907		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6316210	B1	20011113	US 1999-388128	19990901
PRAI	US 1999-388128	A1	19990901		
	US 1995-575416	B2	19951220		
	US 1996-775703	A2	19961218		
	WO 1996-US20435	A2	19961220		
	US 1998-218755	A2	19981222		

AB The present invention relates to genetic elements that suppress the activities of the human immunodeficiency virus (HIV). In particular, the invention relates to polynucleotides isolated from the HIV-1 genome, methods for isolating, identifying and designing such polynucleotides, and methods for using them for the protection of human cells against HIV infection and/or replication. The present invention also relates to polynucleotides that prevent tumor cell formation and the use of such polynucleotides to prevent tumorigenesis.

L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 2000:441930 CAPLUS
DN 133:69805
TI Identification of human immunodeficiency virus (HIV) genetic suppressor elements (GSEs) and their uses to inhibit HIV infection and/or replication
IN Dunn, Stephen J.; Holzmayer, Tanya A.
PA Subsidiary No. 3, Inc., USA

SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000037635	A2	20000629	WO 1999-US30187	19991217
	WO 2000037635	A3	20011018		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	EP 1144621	A2	20011017	EP 1999-966409	19991217
	EP 1144621	A3	20020227		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRAI	US 1998-218755	A1	19981222
	WO 1999-US30187	W	19991217

AB The present invention relates to genetic elements in HIV genome that suppress HIV replication activities. HIV RFE library is prepd. by digesting HIV-1 proviral DNA into fragments between 100-700bp and ligating them into plasmid vectors. These plasmid DNAs are used to transfect OM10.1 cells which contain a latent and TNF.alpha. inducible HIV-1 provirus. Specific GSE sequences are recovered from cells that continue to express CD4 following induction of the laten HIV provirus by TNF.alpha. and mapped to HIV-1 genome. These GSE sequences can be used to protect human cells against HIV infection and/or replication.

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS
AN 1994:126944 CAPLUS
DN 120:126944
TI Single-step amplification method for RNA
IN Mallet, Francois; Oriol, Guy; Mandrand, Bernard
PA Bio Merieux, Fr.
SO Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 569272	A1	19931110	EP 1993-401119	19930429
	EP 569272	B1	19980617		

R: BE, CH, DE, ES, FR, GB, IT, LI, NL

	FR 2690691	A1	19931105	FR 1992-5322	19920429
	FR 2690691	B1	19990212		
	CA 2095070	AA	19931030	CA 1993-2095070	19930428
	ES 2118916	T3	19981001	ES 1993-401119	19930429
	US 5654143	A	19970805	US 1995-412229	19950327
	US 5817465	A	19981006	US 1997-825617	19970331
PRAI	FR 1992-5322		19920429		
	US 1993-53498		19930429		
	US 1995-412229		19950327		

AB A single-step, single-container procedure for reverse transcriptase (RT) PCR is described. All solns. and reagents are added to the container prior to the first step (denaturation of the RNA). The container may be

closed throughout the procedure. This reduces risk of contamination and risk of errors in manipulation of solns. An RT not normally considered to be thermostable (e.g., avian myeloblastosis virus or murine Moloney leukemia virus RT) can be used in the process. The method was applied to amplification of HIV-1 cDNA.

=> s tctatcaaagcaacccac/sqsn
REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L9 22 L8

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10 22 DUP REM L9 (0 DUPLICATES REMOVED)

=> d 1-22 ti

L10 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Retroviral vectors containing SNV gag-pol capable of transducing therapeutic genes into quiescent cells and packaging cell lines for producing thereof

L10 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Novel use

L10 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Fusion proteins comprising HIV Tat and/or Nef proteins and their production with recombinant cells for use as vaccines

L10 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI First recombinant hepatitis virus vectors reported for expression of foreign genes

L10 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Method of simultaneously detecting amplified nucleic acid sequences and cellular antigens in cells

L10 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Recombinant nucleic acids containing a negative transdominant mutant of gene rev for inhibiting HIV gene expression

L10 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Detection of human retrovirus infection using probes specific for spliced RNA

L10 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Detection of HIV-1 infection in vitro using NASBA: an isothermal RNA amplification technique

L10 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Antisense viruses and antisense-ribozyme viruses

L10 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Single-step amplification method for RNA

L10 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI The development and testing of retroviral vectors expressing trans-dominant mutants of HIV-1 proteins to confer anti-HIV-1 resistance

L10 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Human immunodeficiency virus tat gene and TAR element in gene expression in yeast

L10 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Transdominant repressors of homologous genes in multiple virus species

L10 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Identification of trans-dominant HIV-1 rev protein mutants by direct transfer of bacterially produced proteins into human cells

L10 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis of the human immunodeficiency virus TAT gene using in vivo gap repair

L10 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Recombinant vaccinia virus expressing the human immunodeficiency virus tat gene

L10 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Cloning and expression of tat-3 gene of AIDS virus in Escherichia and its use in production of antisera and diagnosis

L10 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Expression of the art gene protein of human T-lymphotropic virus type III (HTLV-III/LAV) in bacteria

L10 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Synthesis of the complete trans-activation gene product of human T-lymphotropic virus type III in Escherichia coli: demonstration of immunogenicity in vivo and expression in vitro

L10 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Three novel genes of human T-lymphotropic virus type III: immune reactivity of their products with sera from acquired immune deficiency syndrome patients

L10 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI A second post-transcriptional trans-activator gene required for HTLV-III replication

L10 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2002 ACS
TI Trans-Activator gene of human T-lymphotropic virus type III (HTLV-III)

=> d his

(FILE 'HOME' ENTERED AT 11:01:42 ON 25 SEP 2002)

FILE 'MEDLINE, BIOSIS, CAPLUS' ENTERED AT 11:01:58 ON 25 SEP 2002
L1 172 S REVERSE(W)TRANSCRIPT? (9A) TEMPERATURE#
L2 16 S L1 AND OPTIM?
L3 11 DUP REM L2 (5 DUPLICATES REMOVED)
L4 34 S L1 AND PY<1993
L5 23 DUP REM L4 (11 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 11:08:56 ON 25 SEP 2002

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     FILE 'REGISTRY' ENTERED AT 11:09:52 ON 25 SEP 2002
L6            13 S CCTATCTGTCCCCTCAGCTAC/SQSN

     FILE 'CAPLUS' ENTERED AT 11:10:44 ON 25 SEP 2002
L7             5 S L6
                 S TCTATCAAAGCAACCCAC/SQSN

     FILE 'REGISTRY' ENTERED AT 11:11:51 ON 25 SEP 2002
L8            79 S TCTATCAAAGCAACCCAC/SQSN

     FILE 'CAPLUS' ENTERED AT 11:12:16 ON 25 SEP 2002
L9            22 S L8
L10           22 DUP REM L9 (0 DUPLICATES REMOVED)

=> file registry
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   6.63      96.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                   0.00      -4.96

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DICTIONARY FILE UPDATES:  23 SEP 2002  HIGHEST RN 454421-17-1

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Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s l8 and 10-110/sql
       2621850 10-110/SQL
L11            9 L8 AND 10-110/SQL

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COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   4.38     101.21

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                   0.00      -4.96

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FILE LAST UPDATED: 24 Sep 2002 (20020924/ED)

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=> s l11
L12 4 L11

=> d 1-4 bib ab

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1997:265577 CAPLUS
DN 126:248592
TI Method of simultaneously detecting amplified nucleic acid sequences and cellular antigens in cells
IN Patterson, Bruce; Goolsby, Charles L., Jr.
PA Northwestern University, USA; Patterson, Bruce; Goolsby, Charles L., Jr.
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9708343	A1	19970306	WO 1996-US13936	19960830
	W: AU, CA, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5843640	A	19981201	US 1995-521467	19950830
	AU 9669607	A1	19970319	AU 1996-69607	19960830
	EP 847451	A1	19980617	EP 1996-930633	19960830
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
PRAI	US 1995-521467		19950830		
	US 1992-901702		19920619		
	US 1994-245530		19940518		
	WO 1996-US13936		19960830		

AB The invention concerns the detection of amplified nucleic acid sequences and cell antigens, and esp. the simultaneous detection of these amplified nucleic acid sequences and antigens in cells by fluorescence microscopy or fluorescence-activated flow cytometry. In one aspect, the present invention provides an in situ process of simultaneously detecting a specific predetd. nucleic acid sequence and a specific predetd. cellular antigen in the same cell. In accordance with that process, the antigen is

labeled with a biotin- or DNP-tagged antibody that specifically immunoreacts with the antigen, the specific nucleic acid sequences in the cell are amplified, the amplified nucleic acid sequences are labeled with a fluorescently-tagged nucleic acid probe that specifically hybridizes to the amplified nucleic acid sequences, and the labeled nucleic acid sequences and labeled cellular antigen are detected. The method may be used for, e.g., the in situ detection of HIV-1 proviral DNA and cell surface CD4 antigen in T cells.

L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1996:404905 CAPLUS
DN 125:78513
TI Detection of human retrovirus infection using probes specific for spliced RNA
IN Romano, Joseph W.; Pal, Ranajit
PA Akzo Nobel N.V., Neth.
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614437	A2	19960517	WO 1995-US14850	19951101
	WO 9614437	A3	19960815		
	W: AU, CA, FI, JP, KR, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5660979	A	19970826	US 1994-334499	19941104
	CA 2204372	AA	19960517	CA 1995-2204372	19951101
	AU 9641601	A1	19960531	AU 1996-41601	19951101
	EP 791079	A2	19970827	EP 1995-939971	19951101
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508492	T2	19980825	JP 1995-515546	19951101
	FI 9701897	A	19970702	FI 1997-1897	19970502
PRAI	US 1994-334499		19941104		
	WO 1995-US14850		19951101		

AB A method for detg. virus replication in human cells by human retrovirus using RNA amplification comprises detecting the hybridization of an RNA probe which specifically hybridizes with spliced RNA and not with genomic RNA. This method permits early detection of RNA replication resulting from primary infection without detecting non-replicating virus. The method is illustrated using NASBA (nucleic acid sequence-based amplification) and gag or tat transcript primers and probes to study the effect of neutralizing antibodies, sol. CD4 or AZT on HIV-1 virus replication in lymphocytes.

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1995:727119 CAPLUS
DN 123:277008
TI Detection of HIV-1 infection in vitro using NASBA: an isothermal RNA amplification technique
AU Romano, Joseph W.; Shurtliff, Roxanne N.; Sarngadharan, M. G.; Pal, Ranajit
CS Advanced BioSciences Laboratories Inc., 5510 Nicholson Ave., Kensington, MD, 20895, USA
SO Journal of Virological Methods (1995), 54(2,3), 109-19
CODEN: JVMEDH; ISSN: 0166-0934
PB Elsevier
DT Journal
LA English
AB Establishment of a sensitive infection assay for HIV-1 is essential for successful screening of antiviral agents and neutralizing antibodies. In

this report, an infection assay is described which measures the expression of viral genomic RNA and spliced mRNA intermediates in infected cells by an amplification-based technique called NASBA. The extreme sensitivity of this method permits the detection of viral RNA in peripheral blood mononuclear cells (PBMC) within 48 h of infection by a low dose of virus. Similarly, spliced HIV-1 mRNA could be detected within 24 h of infection of CEM cells by HIV-1IIIB. This NASBA-based infection assay was shown to titer the neutralization of the HIV-1IIIB isolate by serum from an infected human and by a monoclonal antibody to gp120. Furthermore, the inhibitory effects of azidothymidine (AZT) and sol. CD4 on HIV-1IIIB infection were quantitated by this assay. The early detection of virus by NASBA minimizes the contribution of secondary infection, thereby permitting more accurate evaluation of antiviral agents and neutralizing antibodies. This assay may be useful for the study of infection of phenotypically distinct HIV-1 isolates, which differ in terms of their replication kinetics.

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1994:126944 CAPLUS
DN 120:126944
TI Single-step amplification method for RNA
IN Mallet, Francois; Oriol, Guy; Mandrand, Bernard
PA Bio Merieux, Fr.
SO Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 569272	A1	19931110	EP 1993-401119	19930429
	EP 569272	B1	19980617		
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
	FR 2690691	A1	19931105	FR 1992-5322	19920429
	FR 2690691	B1	19990212		
	CA 2095070	AA	19931030	CA 1993-2095070	19930428
	ES 2118916	T3	19981001	ES 1993-401119	19930429
	US 5654143	A	19970805	US 1995-412229	19950327
	US 5817465	A	19981006	US 1997-825617	19970331
PRAI	FR 1992-5322		19920429		
	US 1993-53498		19930429		
	US 1995-412229		19950327		

AB A single-step, single-container procedure for reverse transcriptase (RT) PCR is described. All solns. and reagents are added to the container prior to the first step (denaturation of the RNA). The container may be closed throughout the procedure. This reduces risk of contamination and risk of errors in manipulation of solns. An RT not normally considered to be thermostable (e.g., avian myeloblastosis virus or murine Moloney leukemia virus RT) can be used in the process. The method was applied to amplification of HIV-1 cDNA.